

What Is Claimed Is:

1. A discharge lamp for photodynamic therapy comprising,

a discharge lamp which radiates a light of a wavelength suitable to the wavelength range of absorption of a photosensitizer having a relatively large absorption coefficient within the range of the wavelengths of 600nm-800nm, and

has a function to emit light having the wavelength region of the main absorption within the range of the wavelengths of 600nm-800nm,

said discharge lamp is filled with  $0.1 \mu\text{mol}/\text{cm}^3$  or more of any selected from the group of lithium (Li), sodium (Na), rubidium (Rb), or potassium (K) as an emitting element, and

further filled with at least one or more of rare gases selected from the group of neon (Ne), argon (Ar), krypton (Kr) and xenon (Xe).

2. The discharge lamp for photodynamic therapy of Claim 1, wherein lithium (Li) is filled as the emitting element for radiating the lights of 600nm-640nm, and 660nm-720nm of the wavelength region of the main absorption.

3. The discharge lamp for photodynamic therapy of Claim 1, wherein sodium (Na) is filled as the emitting

element for radiating the light of 600nm-640nm of the wavelength region of the main absorption.

4. The discharge lamp for photodynamic therapy of Claim 1, wherein rubidium (Rb) is filled as the emitting element for radiating the light of 755nm-800nm of the wavelength region of the main absorption.

5. The discharge lamp for photodynamic therapy of Claim 1, wherein potassium (K) is filled as the emitting element for radiating the light of 760nm-800nm of the wavelength region of the main absorption.

6. The discharge lamp for photodynamic therapy of Claim 1, wherein at least two or more elements selected from the group of lithium (Li), sodium (Na), rubidium (Rb) and potassium (K) are filled as the emitting elements.

7. The discharge lamp for photodynamic therapy of Claim 1, wherein mercury (Hg) is further filled for increasing line in the emission spectrum of said lithium (Li), sodium (Na), rubidium (Rb), potassium (K).

8. A discharge lamp for photodynamic therapy or photodynamic diagnosis comprising,

a discharge lamp which radiates a light of a wavelength suitable to the wavelength range of absorption of a photosensitizer having a relatively large absorption

coefficient within the range of the wavelength of 600nm-800nm, and a light of a wavelength suitable to a photosensitizer, which absorbs light within the range of the wavelength of 400nm-440nm, and emits fluorescence, and

has a function to emit light having the wavelength region of the main absorption within the range of the wavelength of 600nm-800nm and also emit light having the wavelength region of the main absorption within the range of the wavelength of 400nm-440nm,

said discharge lamp is filled with 0.1  $\mu\text{mol}/\text{cm}^3$  or more of any selected from the group of lithium (Li), sodium (Na), rubidium (Rb), or potassium (K), and 0.1  $\mu\text{mol}/\text{cm}^3$  or more of mercury (Hg) as an emitting element, and

further filled with at least one or more rare gases selected from the group of neon (Ne), argon (Ar), krypton (Kr) and xenon (Xe).

9. The discharge lamp for photodynamic therapy or photodynamic diagnosis of Claim 8, wherein lithium (Li) is filled as the emitting element for radiating the lights of 600nm-640nm, and 660nm-800nm of the wavelength region of the main absorption.

10. The discharge lamp for photodynamic therapy or photodynamic diagnosis of Claim 8, wherein sodium (Na) is filled as the emitting element for radiating the light of 600nm-700nm of the wavelength region of the main

absorption.

11. The discharge lamp for photodynamic therapy or photodynamic diagnosis of Claim 8, wherein rubidium (Rb) is filled as the emitting element for radiating the light of 755nm-800nm of the wavelength region of the main absorption.

12. The discharge lamp for photodynamic therapy or photodynamic diagnosis of Claim 8, wherein potassium (K) is filled as the emitting element for radiating the light of 760nm-800nm of the wavelength region of the main absorption.

13. The discharge lamp for photodynamic therapy or photodynamic diagnosis of Claim 8, wherein at least two kinds or more selected from the group of lithium (Li), sodium (Na), rubidium (Rb) and potassium (K) are filled as the emitting elements.

14. The discharge lamp for photodynamic therapy of Claim 1, wherein halogen is also filled into said discharge lamp.

15. The discharge lamp for photodynamic therapy or photodynamic diagnosis of Claim 8, wherein halogen is also filled into said discharge lamp.